(12) UK Patent Application (19) GB (11) 2 118 137 A

(21) Application No 8301508
(22) Date of filing 20 Jan 1983
(30) Priority data
(31) 8206887
(32) 9 Mar 1982
(31) 8208985
(32) 26 Mar 1982
(31) 8211237
(32) 19 Apr 1982
(33) United Kingdom (GB)
(43) Application published
26 Oct 1983
(51) INT CL³
B65D 19/40
(52) Domestic classification
B8H QH
U1S 1898 B8H
(56) Documents cited
GB 1186695
GB 0620701
(58) Field of search
B8H
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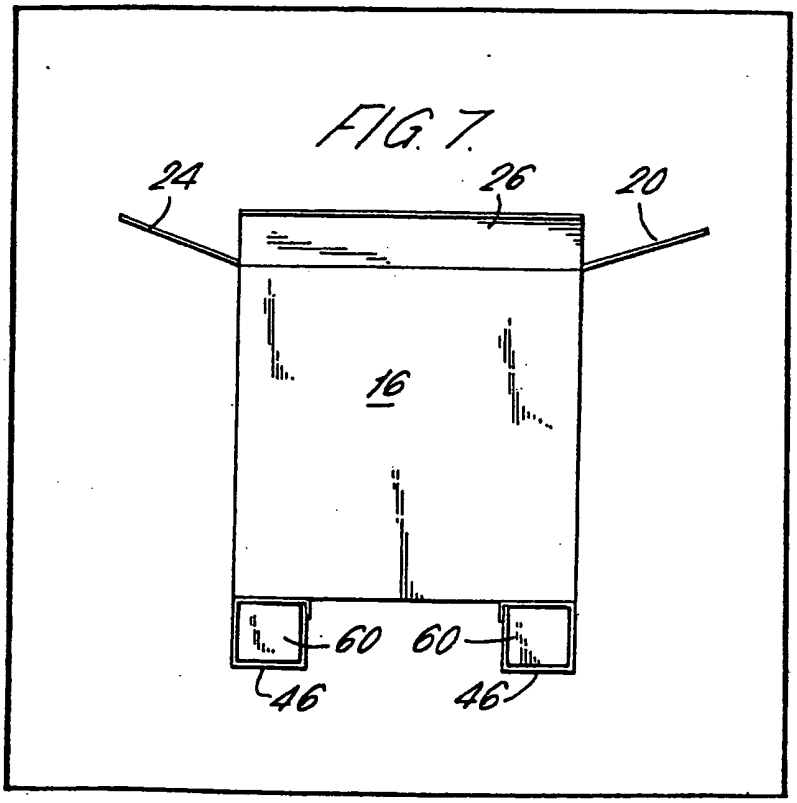
(54) Pallets and palletised containers

(57) A pallet or palletised container comprises a deck supported above the ground by a plurality of horizontally extending, collapsible, tubular support spacers (46), each of which is provided with at least one insert (60) which can be fitted in the spacer (46) to hold the spacer erect. The inserts (60) may be box-like structures, or tubular formations which may be collapsible. Fixing of the spacers (46) to the deck may be by tongues and grooves.



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The drawings originally filed were informal and the print here reproduced is taken from a later filed formal copy.

FIG. 1.

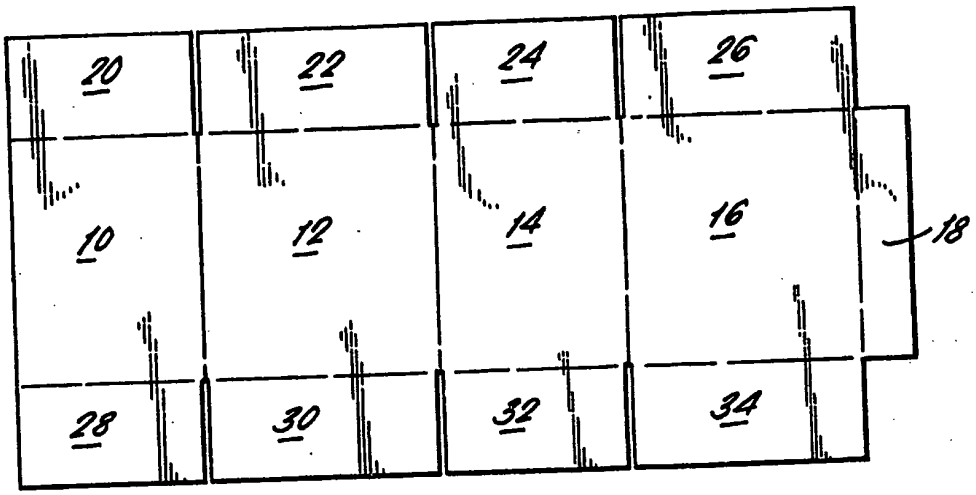
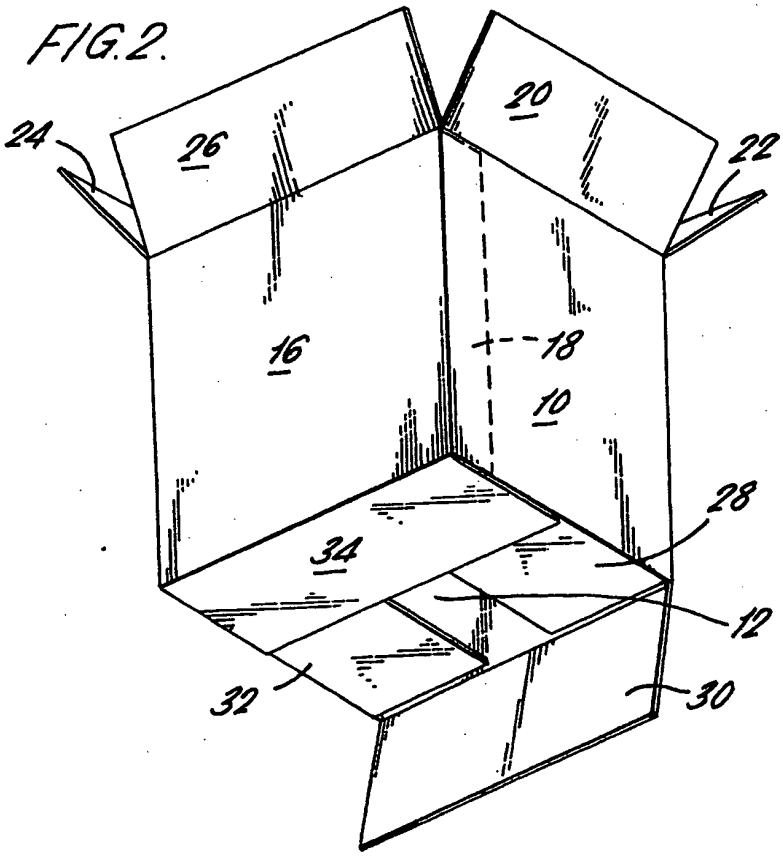


FIG. 2.



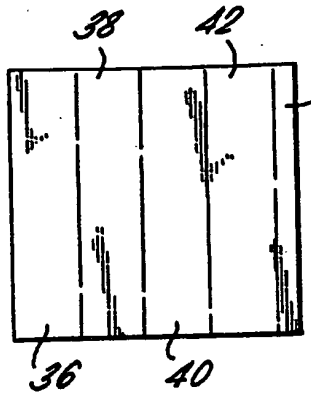


FIG. 3.

FIG. 4.

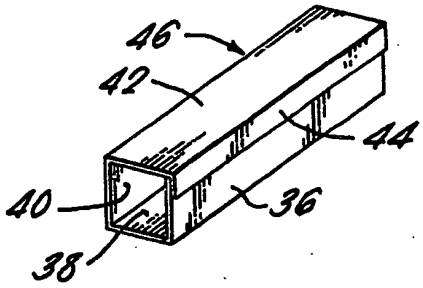


FIG. 5.

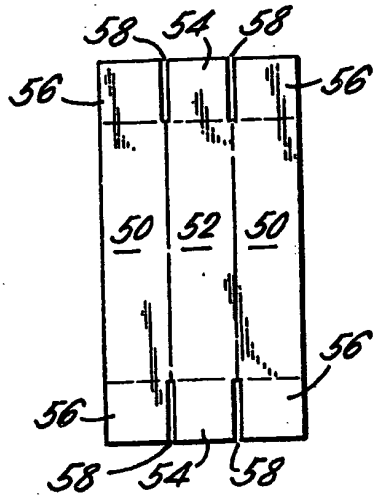


FIG. 6.

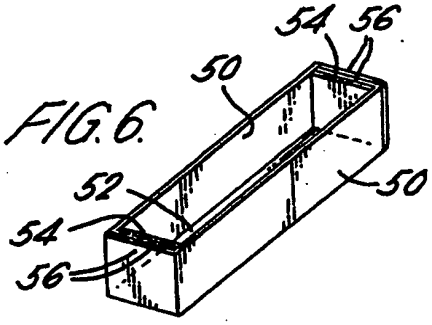


FIG. 7.

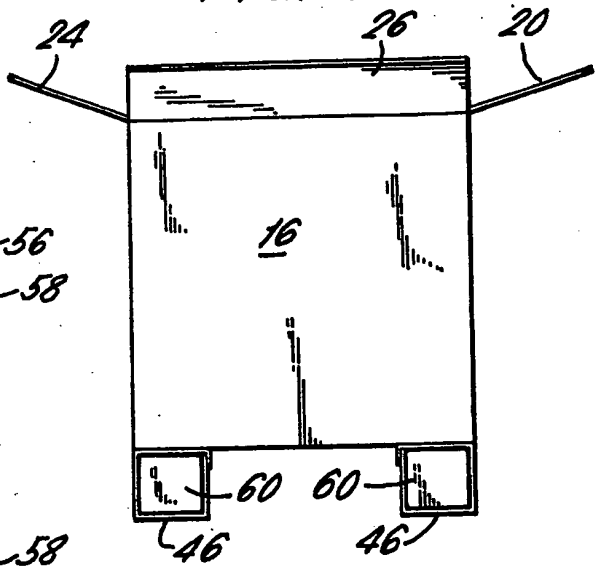


FIG. 8.

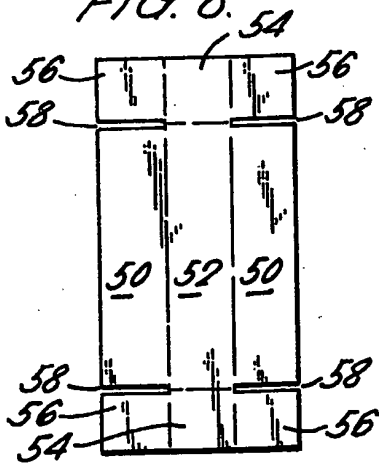


FIG. 9.

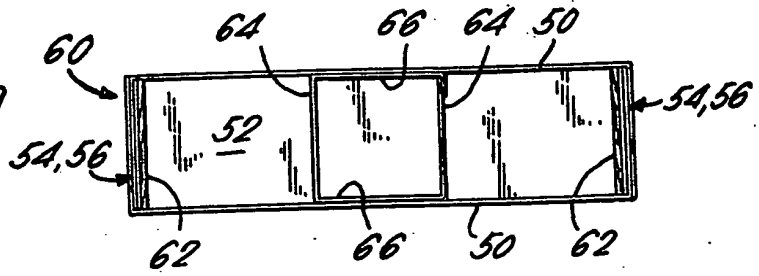


FIG. 11.

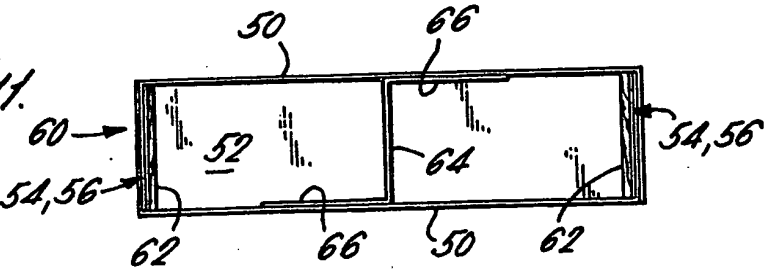


FIG. 13.

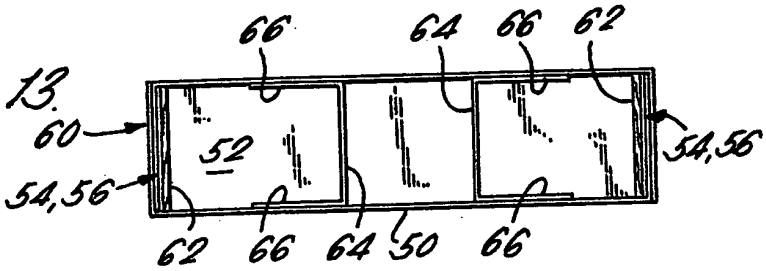


FIG. 10.

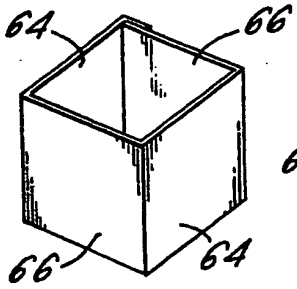
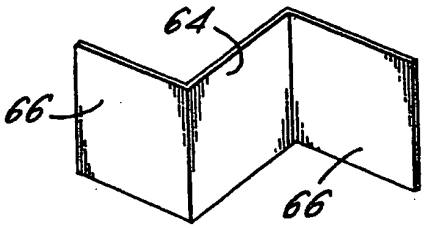


FIG. 12.



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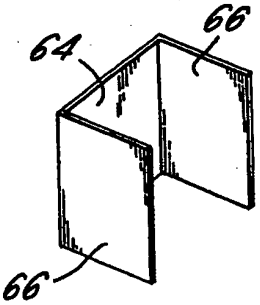
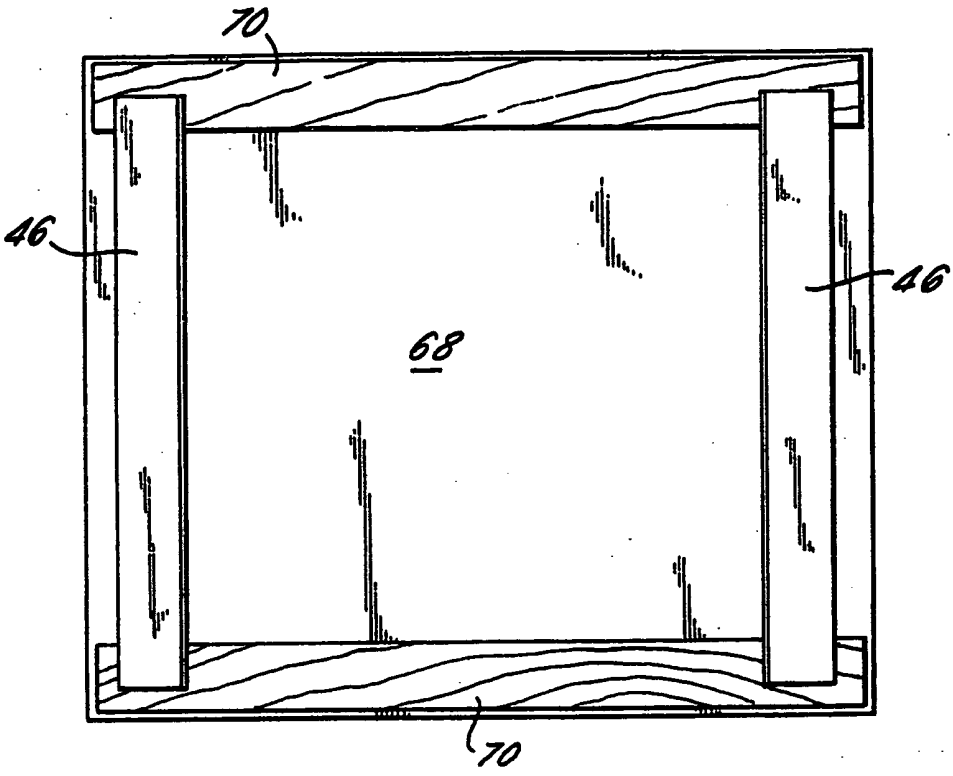


FIG. 15.



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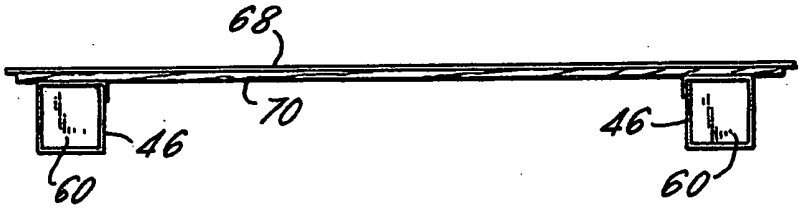


FIG. 17.

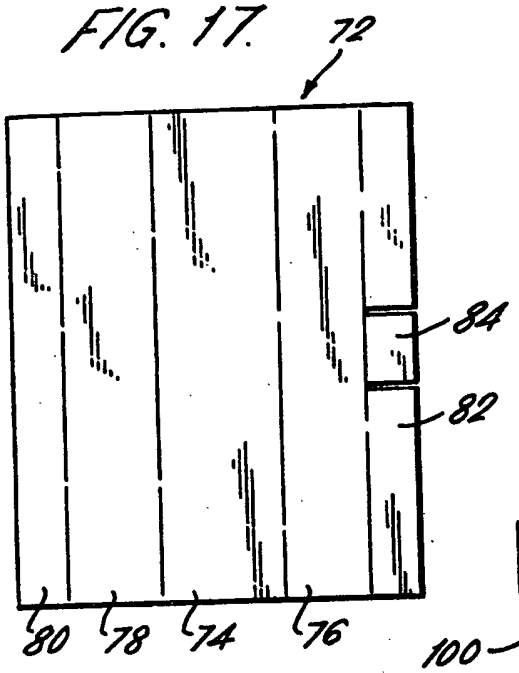


FIG. 18.

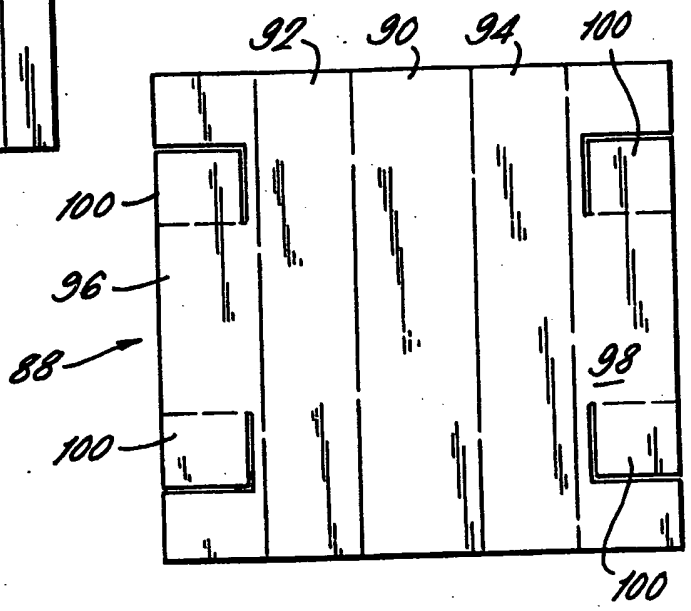
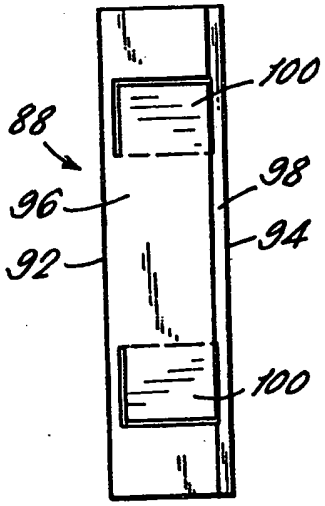


FIG. 19.



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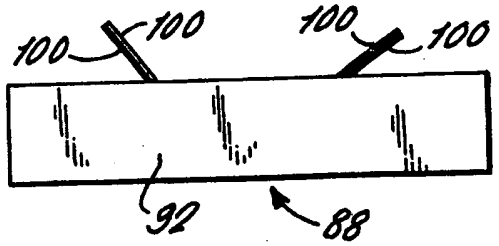

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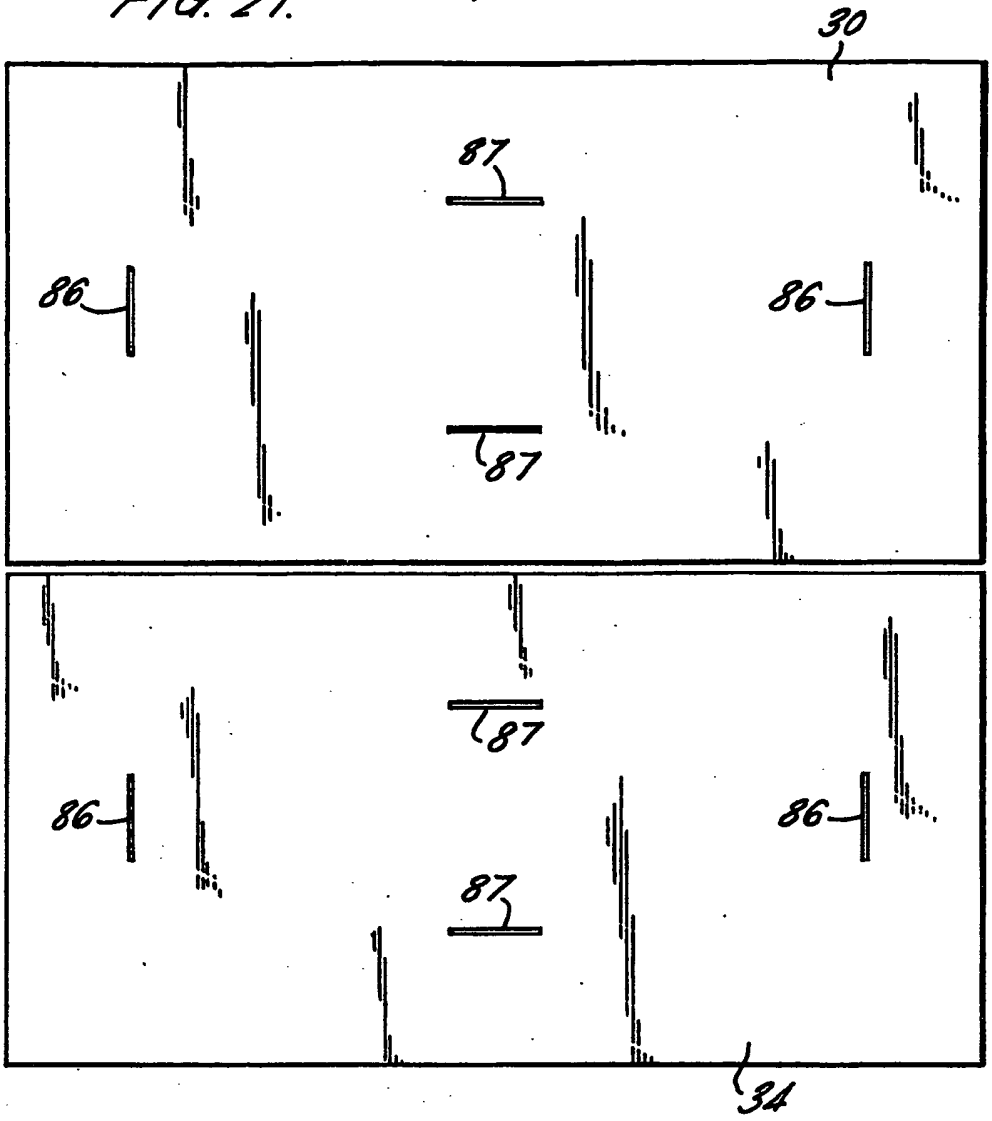
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FIG. 22.

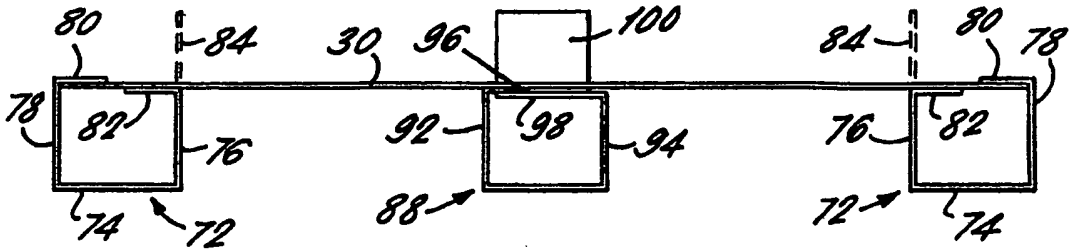
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FIG. 23.

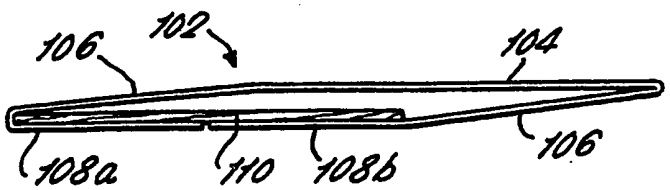
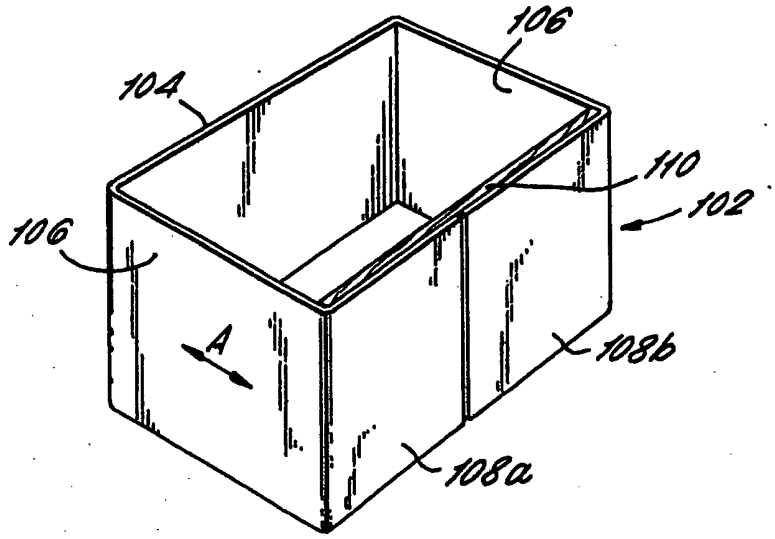


FIG. 24.



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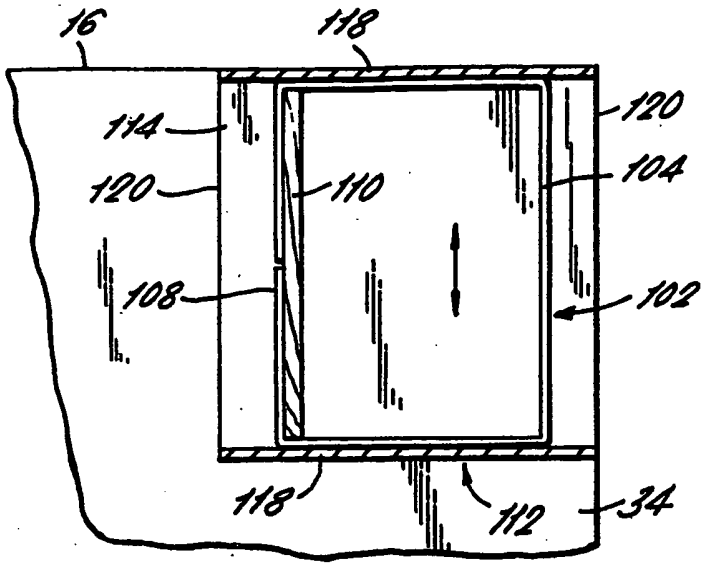
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FIG. 26.

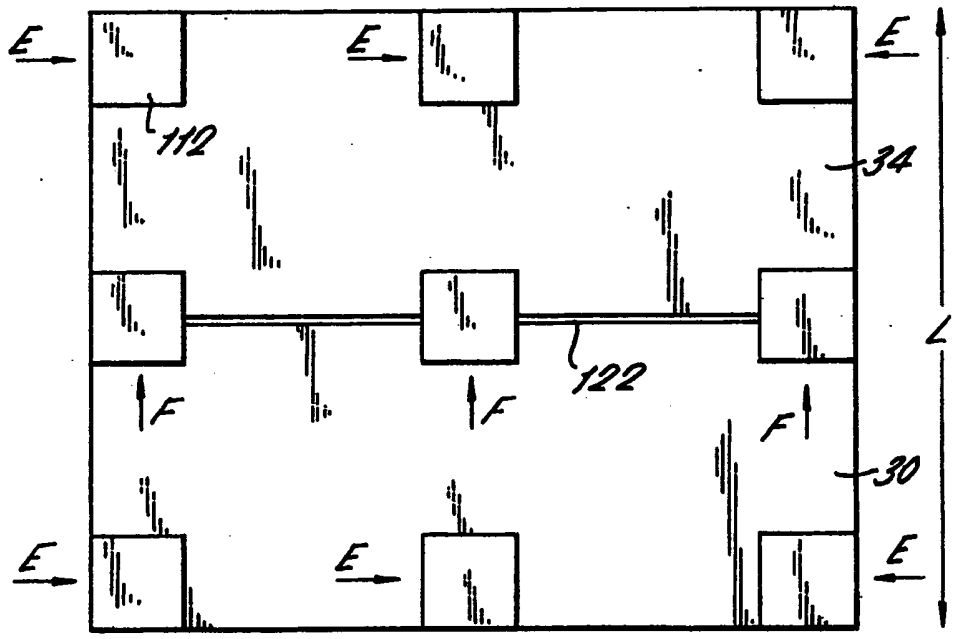
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FIG. 27.

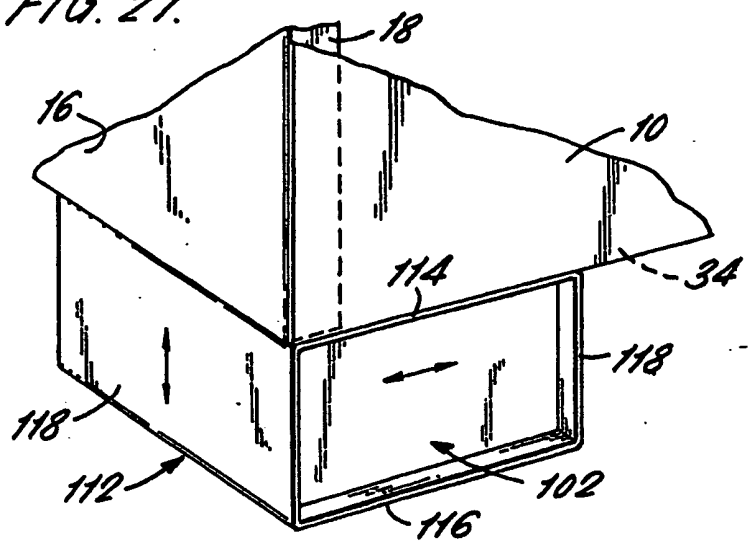

FIG. 28.

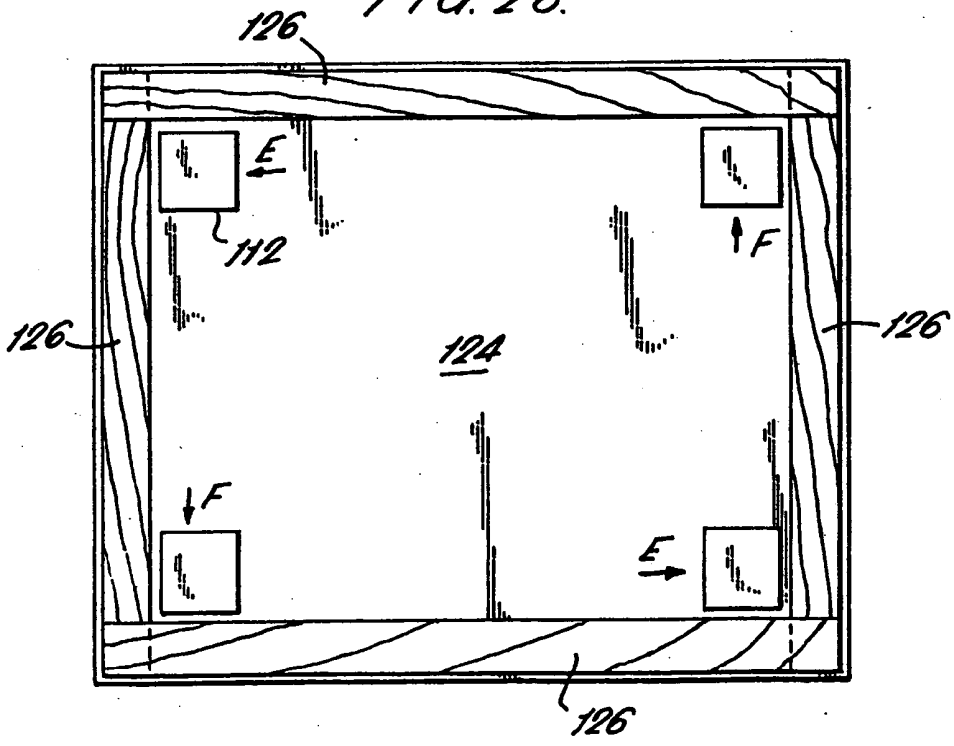

FIG. 29.

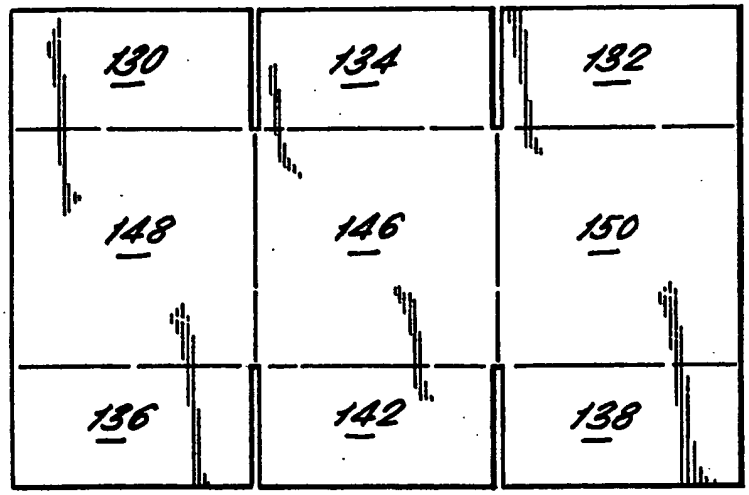
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FIG. 30.

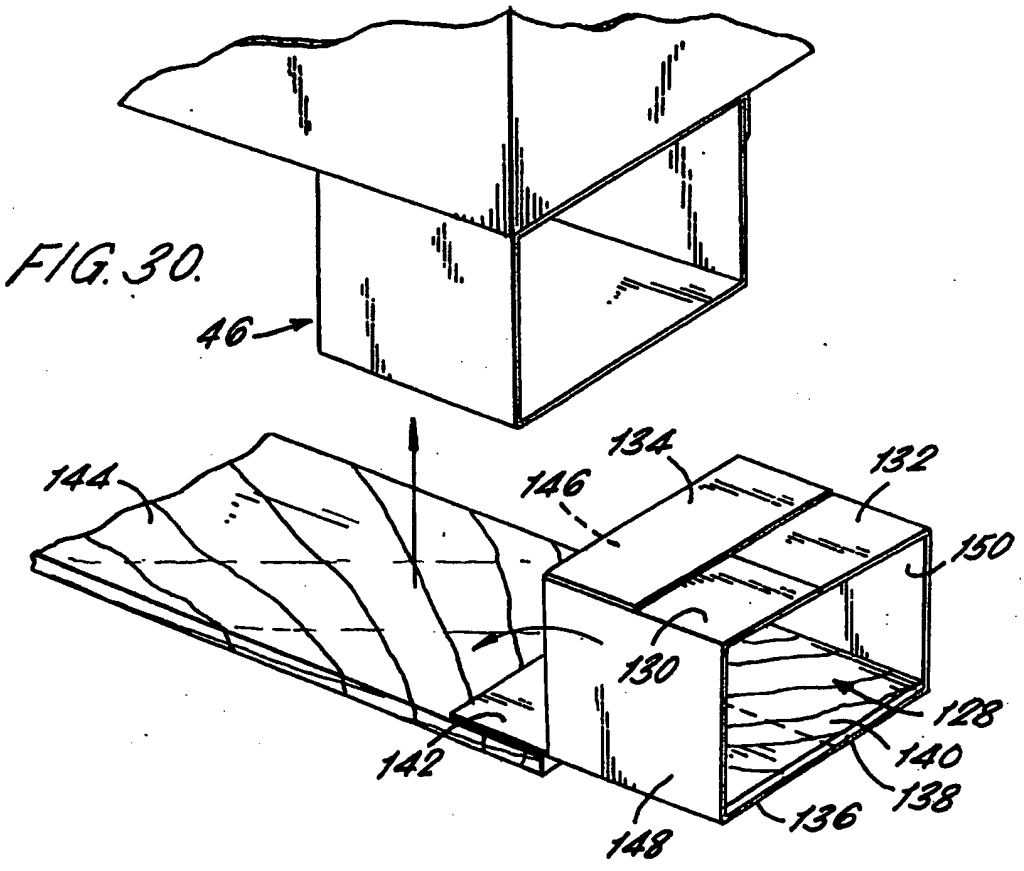
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FIG. 31.

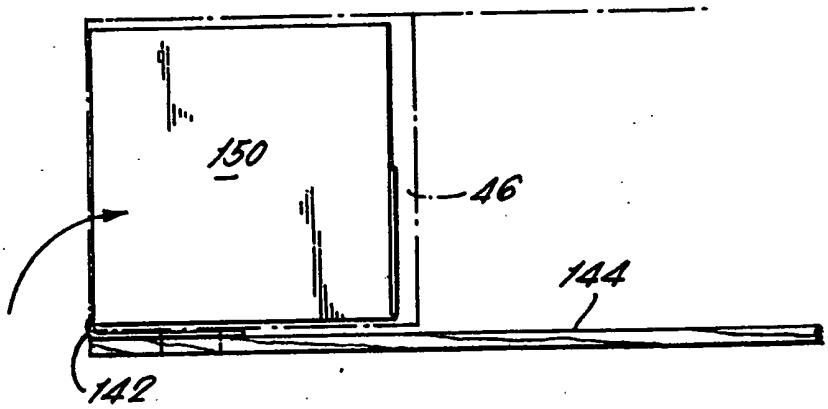
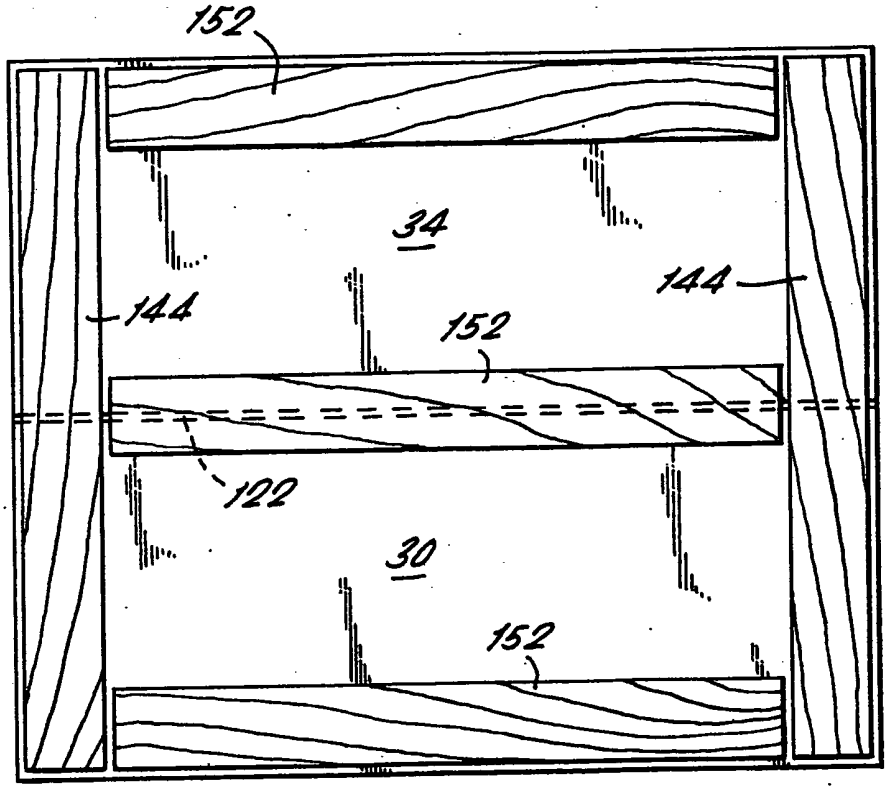


FIG. 32.



SPECIFICATION

Pallets and palletised containers

This invention relates to pallets and palletised containers.

According to a first aspect of the present invention there is provided a pallet or palletised container comprising a deck for supporting a load, the deck being provided on the underside thereof with a plurality of tubular supports of sheet material arranged with the longitudinal axes of the supports extending generally parallel to the deck and being collapsable generally flat against the deck, and at least one insert for each support, each insert having a shell formed of sheet material which is folded and secured to form a box-like structure, and the inserts being engageable in the respective supports to hold the supports erect so that the supports can support the deck spaced above a support surface.

According to a second aspect of the present invention there is provided a pallet or palletised container, comprising a deck for supporting a load, the deck being provided on the underside thereof with a plurality of tubular supports of sheet material arranged with the longitudinal axes of the supports extending generally parallel to the deck and being foldable from a collapsed configuration in which the support lies substantially flat against the underside of the deck to an erect configuration, and, for each tubular support, at least one insert element which is tubular or part-tubular about a longitudinal axis and which has a profile in one direction transverse to that axis which corresponds to the inner profile of the respective erect support, so that with the insert element located in the support, with said profiles of the insert element and support corresponding, the support is held erect to support the deck spaced above a support surface.

According to a third aspect of the present invention there is provided a pallet or palletised container, comprising a deck for supporting a load, the deck being provided on the underside thereof with a plurality of tubular supports of sheet material arranged with the longitudinal axes of the supports extending substantially parallel to the deck and being foldable from a collapsed configuration in which the support lies substantially flat against the underside of the deck to an erect configuration, and, for each tubular support, at least one tubular insert element of sheet material, the insert element being foldable from a collapsed configuration in which the insert is substantially flat to an opened-out configuration, and the insert element in the opened-out configuration having a profile in one direction transverse to the longitudinal axis of the insert element which corresponds to the inner profile of the respective erect support, so that with the insert in the opened-out configuration located in the support with said profiles of the insert element and support corresponding, the support in held erect to support the deck spaced above a support surface.

According to a fourth aspect of the present invention there is provided a pallet or palletised container, comprising a deck for supporting a load, the deck being provided on the underside thereof with a plurality of tubular supports of sheet material arranged with the longitudinal axes of the supports extending generally parallel to the deck, and means to hold the supports erects so that the supports can support the deck spaced above a support surface, each tubular support including a base and a pair of walls extending between the deck and the base, at least one of the walls being secured to the deck by means of tongue means on that wall engageable in slot means in the deck.

Specific embodiments of the present invention will now be described by way of example with reference to the accompanying drawings, in which:

Figures 1 to 7 illustrate one embodiment of the present invention and in particular:

Figure 1 illustrates a blank for a simple case;

Figure 2 is a perspective view from below of a case nearly completely assembled from the blank shown in Figure 1;

Figure 3 illustrates a blank for a support spacer;

Figure 4 is a perspective view of a spacer made from the blank of Figure 3;

Figure 5 illustrates a blank for an insert;

Figure 6 is a perspective view of an insert made from the blank of Figure 5;

Figure 7 is an end view of a two-way entry palletised case according to the invention comprising the simple case shown in Figure 2, two of the spacers shown in Figure 4 and two of the inserts shown in Figure 6;

Figure 8 illustrates a modification of the insert blank shown in Figure 5;

Figures 9, 11 and 13 are plan views of inserts illustrated modifications to the insert shown in Figure 6;

Figures 10, 12 and 14 are perspective views showing detail of the modifications shown in Figures 9, 11 and 13, respectively;

Figure 15 is an under plan view of a two-way entry pallet according to the present invention;

Figure 16 is an end view of the pallet shown in Figure 15;

Figures 17 to 22 illustrate another embodiment of the present invention, and in particular;

Figure 17 illustrates a blank for one type of support spacer;

Figure 18 illustrates a blank for a further type of support spacer;

Figure 19 is a plan view of a support spacer made from a blank as shown in Figure 18;

Figure 20 is a side view of the spacer shown in Figure 19;

Figure 21 is an under-plan view of a case of the type shown in Figure 2;

Figure 22 is an end view of the outer lower flaps of the case of Figure 21 with the support spacers attached, in order to form a two-way

entry palletised case according to the present invention;

Figures 23 to 27 illustrate a further embodiment of the present invention, and in particular:

Figure 23 is a top view of an insert in a collapsed configuration;

Figure 24 is a perspective view of the insert of Figure 23 in an opened-out configuration;

Figure 25 is a sectioned under-plan view of part of a four-way entry palletised case according to the present invention using the inserts of Figures 23 and 24 and a case of the type shown in Figures 1 and 2.

Figure 26 is a full under-plan view of the case shown in Figure 25;

Figure 27 is a perspective view of a lower corner of the case shown in Figures 25 and 26;

Figure 28 is an under-plan view of a four-way entry pallet according to the present invention: and

Figures 29 to 32 illustrate yet another embodiment of the present invention and in particular:

Figure 29 illustrates a blank for a further form of insert;

Figure 30 is a partial perspective view showing an arrangement for supporting a container, using the insert of Figure 29, prior to assembly;

Figure 31 is a partial side view showing the insert of Figure 29 after insertion beneath a container; and

Figure 32 is an under-plan view of a modified form of the contaner shown in Figure 30.

Referring to Figures 1 and 2 of the drawings, there is illustrated a case formed of corrugated board material and a blank for making such a case. In the blank, side panels 10, 12, 14, 16 and a stitching flap 18 are arranged in a row. Upper flaps 20, 22, 24, 26 extend to one side of the row of side panels, and on the other side of the row of side panels inner lower flaps 28, 32 extend from side panels 10, 14, and outer lower flaps 30, 34 extend from side panels 12, 16. In construction, the stitching flap 18 is stitched to side panel 10, and the upper and lower flaps are folded inwardly.

Referring to Figures 3 and 4, there is illustrated a support spacer 46 and a blank for making such a spacer. The spacer 46 is in the form of an elongate rectangular tube of corrugated board and comprises vertical walls 36, 40, upper wall 42, lower wall 38, and a stitching flap 44 which extends along the edge of the upper wall 42 and is stitched to one of the vertical walls 36.

Two such support spacers 46 are secured by stitching or gluing to the base of the case of Figure 2, as shown in Figure 7. The support spacers 46 extend along opposite edges of the base, and each spacer 46 extends across both outer lower flaps 30, 34. The support spacers 46 are collapsible. In order to hold the spacers 46 erect, so that they can support the case above the ground and permit forks of a fork-lift truck to be inserted beneath the case, an elongate insert 60 is inserted into each support spacer 46.

A basic form of insert 60 is shown in Figure 6, and a blank for making such an insert 60 is shown in Figure 5. Each insert 60 comprises a base wall 52 and a pair of vertical longitudinal walls 50. Also, tabs 56 are provided at the ends of each vertical wall, and tabs 54 are provided at the ends of the base wall 52, in the blank slots 58 being formed between the tabs 56 and 54. In forming the insert 60 from the blank, the tabs 56, 54 at each end are folded to lie against each other and glued or stitched to provide an open topped elongate tray-like formation. The cross-sectional sides of each insert 60 is such as to be a snug fit in the support spacers 46.

Referring now to Figure 8, there is shown a modification of the Figure 5 blank. In the modification, the slots 58 are provided between the tabs 56 and their respective vertical walls 50, rather than between the tabs 56 and tabs 54. In assembling the blank of Figure 8 to form an insert 60, the tabs 56 are folded to lie against the inner face of each vertical wall 50 and are stitched or glued thereto.

Referring now to Figures 9 to 14, there are illustrated three modified inserts 60 which have strengthening features. In each case, the end wall 54, 56 of the insert is reinforced by a square plywood panel 62 which lies flat against and is stitched or glued to the end wall.

Referring specifically to Figures 9 and 10, the insert 60 is also reinforced partway along its length by a rectangular tubular structure comprising transverse walls 64 and longitudinal walls 66. Referring to Figures 11 and 12, the reinforcing structure is in the form of a zig-zag with longitudinal walls 66 extending in opposite directions from the transverse wall 64. Referring to Figures 13 and 14, two reinforcing structures are provided, each being in the form of a U, with the longitudinal walls 66 extending in the same direction from the transverse wall 64. These reinforcing structures may be formed entirely from corrugated board. Alternatively, they may be formed from board with the transverse walls reinforced by square plywood panels similar to the panels 62. In another alternative construction, each reinforcing structure is formed with plywood walls which are joined together in the form of the rectangular tube, zig-zag or U-shape by metal brackets and rivets. In each case, the longitudinal walls 66 are attached to the respective longitudinal wall 50 of the insert by means of stitching, rivetting or gluing.

Referring now to Figures 15 and 16, there is shown a pallet comprising a deck 68 of corrugated board. A pair of elongate plywood strips 70 extend along opposite edges of the deck 68, and a pair of support spacers 46, of the type described above with reference to Figures 3 and 4, extend along the remaining opposed edges of the deck 68. The plywood strips 70 and support spacers 46 are secured in this arrangement to the underside of the deck 68 by means of stitching or gluing. An insert 60, of the type described above with reference to Figures 5, 6 and 8 to 14 is

provided for each support spacer 46 and is inserted into the spacer to extend along substantially the whole length thereof to hold the spacer 46 erect.

Referring now to Figures 17 to 22, a further embodiment of the invention is shown. Figure 17 shows a blank 72 for an edge support spacer, the blank having a base wall 74, side walls 76, 78, a first securement flap 80, and a second securement flap 82, from which a tongue 84 is separated. Four such blanks are used to form four support spacers 72 which are attached to the outer lower flaps 30, 34 of a case similar to the type shown in Figure 2. However, the flaps 30, 34 are formed with four slots 86 extending in one direction and four further slots 88 extending in a direction at right angles to the first slots 86.

As shown in Figure 22, the edge support spacers 72 wrap around the edges of the flaps 30, 34 with the tongues 84 passing through the respective slots 86. The securement flaps 80 are secured to the lower flaps 30, 34 of the case by stitching or adhesive, and the securement flaps 82 and tongues 84 may also be secured to the respective flaps 30, 34 by, for example, adhesive.

Centre support spacers 88 may be formed from blanks as shown in Figure 18, which have a base wall 90, side walls 92, 94, and top wall portions 96, 98, from which tongues 100 are separated by cutting the board material. Figures 19 and 20 show how the blank of Figure 18 is made into a support spacer, with the top wall portions 96, 98 overlapping, and pairs of tongues 100 also overlapping. In use, the pairs of tongues 100 engage respective slots 88 in the lower flaps 30, 34 of the case, as can be seen in Figure 22. The tongues and/or the top wall portion 96 of the support spacer may be secured to the base flaps 30, 34 by, for example, adhesive.

An insert may be provided for each support spacer 72, 88, for alternatively a longer single insert may be provided for each aligned pair of support spacers 72, 88 extending substantially the whole length of the pair of spacers. The inserts may be of the type described above with reference to Figures 5, 6 and 8 to 14.

In any of the specific embodiments described above, two, three or even four support spacers may be used to support the deck above the ground, depending amongst other things on the load to be carried and size of deck.

The specific embodiments of pallet and palletised containers described above with reference to Figures 1 to 22 are all of the two-way entry type, that is forks of a fork-lift truck can be inserted beneath the case or pallet from two sides but not from the other two sides. Reference will now be made to Figures 23 to 27, which illustrate a four-way entry palletised case in which the forks of a fork-lift truck can be inserted beneath the case from any of the four sides.

Referring to Figure 23, an insert 102 is formed from a rectangular blank of double wall corrugated board folded into a parallelogram shaped tube having sides 104, 106, 106, 108 the side being formed by opposite ends 108A, 108B of the rectangular blank.

These ends 108A, 108B are joined side-by-side by being stitched or glued to a plywood stiffener panel 110. If required, a further stiffener panel (not shown) may be glued or stitched to the opposite side 104 to provide added strength. The flutes of the corrugated board extend around the tubular insert 102, as indicated by the arrow A in Figure 24.

Referring now to Figures 25 to 27, nine short support spacers 112 are fixed to the underside of the outer lower flaps 30, 34 of the case, the spacers 112 thus forming blocks, which are distributed evenly under the case as three rows of three blocks.

Each spacer 112 is collapsable and comprises an upper wall portion 114, a base wall portion 116 and a pair of side wall portions 118.

A collapsable insert 102, as shown in Figures 23 and 24 is used with each spacer 112, the insert being inserted in a slightly out-of-square configuration into the spacer 112 and then being manipulated into the correct "square" position from both open ends of the spacer 112. A shoulder may be formed on the inner surface of the spacer 112, to act as a stop for the insert 102 in order to facilitate correct fitting of the insert 102. It will be noted from Figure 25 that the spacer 112 is slightly longer than the insert 102 so that the sides 104, 108 are recessed within the ends of the spacer 112.

If required for additional strength, the inwardly facing surfaces of sides 106 of the insert 102 may be provided with lining pieces of corrugated board having a flute direction at right angles to the flute direction A of the insert sides 34.

The arrows E, F adjacent to each spacer 112 shown in Figure 26 indicate the direction of insertion of the respective inserts 102. It can be seen that the spacers 112 are arranged so that the direction of insertion F of three of the inserts is at right angles to the direction of insertion E of the remaining six inserts. This decreases the risk of collapse.

Each spacer may be stitched or glued to the underside of the case. Alternatively, they may be formed and attached in a similar manner to that described above with reference to Figures 17 to 22. In that case, the attachment tongues of the spacers may be formed as extensions from the edges 120 of the upper wall portion 114 of the spacer.

Whilst three of the spacers 112 in Figure 26 are shown bridging a central joint 122 between the flaps 30, 34, each of these three spacers may be formed as two spacer halves, one on each base flap 30, 34. Each pair of spacer halves being provided with a common insert 102 bridging the joint 122.

Fewer or more block spacers 112 may be provided depending on the size of the case and the load to be carried. For example, four block spacers may be provided in a twoxtwo arrangement, five spacers in a twoxtwo

arrangement with the further spacer in the centre, six spacers in a two x three arrangement, or twelve spacers may be provided in a four x three arrangement. Also, the base wall portions 116 of the spacers 112 may be joined by elongate narrow plywood strips in rows and columns.

In a modification, the support spacers 112 may be secured to the underside of a tray comprising a deck with an upturned lip around the edge of the deck. An upright rectangular sleeve may then be fitted to the deck so that the bottom edge of the sleeve engages within the lip, in order to form a container.

In a further modification as shown in Figure 28, four of the spacers 112 are secured to the underside of the deck 124 of a pallet, the deck 124 comprising a sheet of corrugated board. The spacers 112 are inset from the corners of the deck 124, and extending around the perimeter of the deck are four elongate narrow strips 126 of plywood, the strips overlapping one another at the corners. Two of the spacers 112 are arranged with the direction of insertion B for the inserts 102 at right angles to the direction of insertion F for the other two spacers 112. In a modification, the strips 126 may be wider than the width shown in Figure 28 and the support spacers 112 may be secured to the strips 126 at their junctions at the corners of the deck 124.

Referring now to Figures 29 to 32, there is shown an insert assembly which may be used with a container of the type shown in Figure 26, but having only four tubular supports 46, being the supports at the corners of the deck.

Each insert is formed from a blank of board as shown in Figure 29 which is folded to form a box-like structure as shown in Figure 30, the box-like structure being open on the side 128. Panels 130, 132 of the structure abut and are overlapped by panel 134, the panels 130, 132, 134 being reinforced and connected by a plywood panel (not shown). Also, panels 136, 138 abut and are joined by a further plywood reinforcing panel 140. Panel 142 forms a hinged flap which is secured to one end of an elongate strip 144 of plywood, and a similar insert is hinged to the other end of the strip 144. The length of the strip 144 is approximately equal to the length L shown in Figure 26.

To fit the inserts and strip to the deck, the strip is offered up below the tubular support as shown by the straight arrow in Figure 30. Each insert is then provided on its hinge flap panel 142 in the direction of the curved arrow in Figure 32, and the insert enters the tubular support 46. The inserts are of such a size in relation to the tubular supports 46 that they are a tight fit when entering and thus, when once pushed fully home, the inserts remain in the tubular supports and secure the strip 144 to the container or pallet.

As shown in Figure 32, further elongate strips 152 may be provided which extend parallel to the joint 122 between the lower base flaps 30, 34 and between the strips 144. The strips 152 are secured to the strips 144 by thin metal plates (not shown).

The strips 144, 152 serve to increase the rigidity of the tubular supports, whilst permitting entry of lifting forks from any of the four sides of the pallet or container.

Additional supports may be provided partway along the strips 144 and/or 152. Such additional supports may be formed in a simular manner to the insert shown in Figure 30, with the exception that the panel 134 is not secured to the panels 130, 133. Instead, the panels 134, 142 are secured to the top of the strip 144 or 152 so that the support extends upwardly to and abuts the deck of the container or pallet.

Claims

1. A pallet or palletised container comprising a deck for supporting a load, the deck being provided on the underside thereof with a plurality of tubular supports of sheet material arranged with the longitudinal axes of the supports extending generally parallel to the deck and being collapsable generally flat against the deck, and at least one insert for each support, each insert having a shell formed of sheet material which is folded and secured to form a box-like structure, and the inserts being engageable in the respective supports to hold the supports erect so that the supports can support the deck spaced above a support surface.

2. A pallet or container as claimed in Claim 1, wherein each insert comprises an elongate tray formation of board material comprising a base and side walls and end walls extending upwardly from the base, the tray formation being formed from a blank of board material.

3. A pallett or container as claimed in Claim 2, wherein the end walls of the inserts are reinforced with a panel of plywood or other stiff material.

4. A pallet or container as claimed in Claim 2 or 3, wherein each tray formation is reinforced partway along its length by at least one transverse panel of plywood or other stiff material.

5. A pallet or container as claimed in Claim 2 or 3, wherein each tray formation is reinforced partway along its length by a tubular structure having a longitudinal axis extending generally at right angles to the base of the tray formation, the tubular structure providing a pair of walls extending transversely of the tray formation and formed of plywood or other stiff material.

6. A pallet or palletised container, comprising a deck for supporting a load, the deck being provided on the underside thereof with a plurality of tubular supports of sheet material arranged with the longitudinal axes of the supports extending generally parallel to the deck and being foldable from a collapsed configuration in which the support lies substantially flat against the underside of the deck to an erect configuration, and, for each tubular support, at least one insert element which is tubular or part-tubular about a longitudinal axis and which has a profile in one

direction transverse to that axis which corresponds to the inner profile of the respective erect support, so that with the insert element located in the support, with said profiles of the insert element and support corresponding, the support is held erect to support the deck spaced above a support surface.

7. A pallet or palletised container, comprising a deck for supporting a load, the deck being provided on the underside thereof with a plurality of tubular supports of sheet material arranged with the longitudinal axes of the supports extending substantially parallel to the deck and being foldable from a collapsed configuration in which the support lies substantially flat against the underside of the deck to an erect configuration, and, for each tubular support, at least one tubular insert element of sheet material, the insert element being foldable from a collapsed configuration in which the insert is substantially flat to an opened-out configuration, and the insert element in the opened-out configuration having a profile in one direction transverse to the longitudinal axis of the insert element which corresponds to the inner profile of the respective erect support, so that with the insert in the opened-out configuration located in the support with said profiles of the insert element and support corresponding, the support is held erect to support the deck spaced above a support surface.

8. A pallet or container as claimed in Claim 7, wherein with the insert element so located in the support, the longitudinal axis of the element extends substantially at right angles to the deck.

9. A pallet or container as claimed in Claim 7 or 8, wherein the inner profile of each erect support is rectangular and preferably is not square.

10. A pallet or container as claimed in Claim 9 wherein each insert element is a rectangular tube in the opened-out configuration.

11. A pallet or container as claimed in Claim 10 wherein at least one of the sides of the tube providing said profile of the insert element is provided with a rigid reinforcing panel.

12. A pallet or container as claimed in Claim 10 or 11, wherein each insert element is formed from a rectangular sheet blank.

13. A pallet as claimed in Claim 11 and Claim 12, wherein said one side of the tube is formed by opposite end portions of the rectangular blank joined by the reinforcing panel.

14. A pallet or container as claimed in any preceding claim, wherein each support extends substantially across the whole width of the deck and at least two of said inserts are provided for each support.

15. A container as claimed in any preceding claim, wherein the deck of the container has a pair of lower base flaps, said supports being arranged in aligned pairs, the supports of each pair being provided on respective base flaps, and one or two of said inserts are provided for each support.

16. A pallet or container as claimed in any preceding claim, wherein each support extends over a small portion of the width or length of the deck.

17. A pallet or container as claimed in Claim 16, wherein some of the supports are arranged with their longitudinal axes all extending in the same direction whilst the longitudinal axes of the remaining supports extend substantially at right angles to that directions.

18. A pallet or container as claimed in any preceding claim, further including means to lock the inserts in the supports.

19. A pallet or container as claimed in any preceding claim, wherein each tubular support includes a base and a pair of walls extending between the deck and the base, at least one of the walls being secured to the deck by means of tongue means on that wall engageable in slot means in the deck.

20. A pallet or palletised container comprising a deck for supporting a load, the deck being provided on the underside thereof with a plurality of tubular supports of sheet material arranged with the longitudinal axes of the supports extending generally parallel to the deck, and means to hold the supports erect so that the supports can support the deck spaced above a support surface, each tubular support including a base and a pair of walls extending between the deck and the base, at least one of the walls being secured to the deck by means of tongue means on that wall engageable in slot means in the deck.

21. A pallet or container as claimed in Claim 19 or 20, wherein a pair of such supports extend along parallel edges of the deck, each such support comprising a first securing portion lying above and against the deck or a portion thereof, one of the walls extending downwardly from the first securing portion, the base extending from the first support wall, and the second support wall extending upwardly from the base and a second securing portion extending beneath the deck of the container, the tongue means being provided by one or more parts of the second securing portion extending through the slot.

22. A pallet or container as claimed in any one of Claims 19 to 21, wherein the slot means associated which each of said pair of supports extend parallel to the longitudinal axis of the support.

23. A pallet or container as claimed in Claim 21 or 22, wherein a further said support is disposed part-way between said pair of supports, the further support also including a top wall extending from the side walls, the tongue means of the further support being formed from parts of the top wall of the support.

24. A pallet or container as claimed in Claim 23, wherein the slot means for the further support extend perpendicularly to the longitudinal axis of the further support.

25. A pallet or container as claimed in any one of Claims 19 to 34, wherein the supports are additionally secured to the deck by adhesive or stitching.

26. A pallet or container as claimed in Claim 1, wherein at least some of the tubular supports are arranged in pairs with the longitudinal axes of the supports of each pair aligned and with the supports of each pair extending over a small portion of the width or length of the deck, the inserts for each pair of supports being hinged to a stiff elongate strip extending between and beneath the supports of that pair and each insert being pivotal from a position outside the respective support to a position inside that support so that the inserts hold the supports erect and lock the elongate strip to the supports.

27. A pallet or container as claimed in Claim 26, wherein at least two such strips extend parallel to each other beneath the deck, there further being provided at least one further stiff elongate strip extending between and secured to the first-mentioned strips.

28. A pallet or container as claimed in Claim 26 or 27, wherein at least one wall of each insert is reinforced by a panel of plywood or other stiff material.

29. A pallet or container as claimed in any of Claims 26 to 28, wherein at least one of the elongate strips is provided partway along its length with a spacer structure formed from folded sheet material extending from that strip to the deck.

30. A pallet or container as claimed in any preceding claim, wherein at least two of the supports are parallel to each other and extend to at least one edge of the deck, the mutual facing side wall of each said two supports extending upwardly to the deck and having a portion extending from the top of the side wall towards the other side wall, an elongate stiffener element being provided along said one edge of the deck between said two supports and being secured at each end between the deck and said portion extending from the top of the respective sidewall.

31. A pallet or palletised container substantially as hereinbefore described with reference to and as illustrated in the following figures of the accompanying drawings:

a) Figures 1 to 7; or

b) Figures 1 to 7 as modified by Figure 8, or by Figures 9 and 10, or by Figures 11 and 12, or by Figures 13 and 14, or by Figures 15 and 16, or by Figures 17 to 22; or

c) Figures 23 to 27; or

d) Figures 23 to 27 as modified by Figure 28; or

e) Figures 29 to 32.

Printed for Her Majesty's Stationery Office by the Courier Press, Leamington Spa, 1983. Published by the Patent Office, 25 Southampton Buildings, London, WC2A 1AY, from which copies may be obtained.